#### **BFD** for Geneve

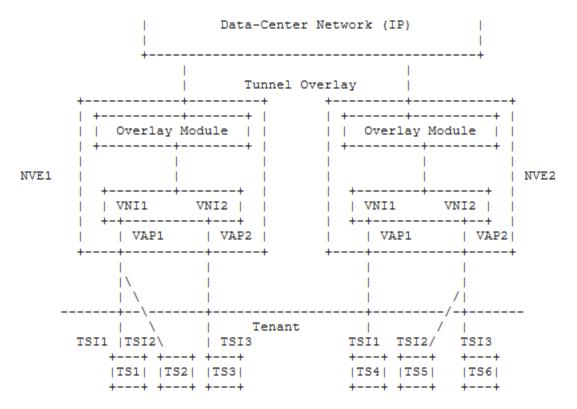
draft-xiao-nvo3-bfd-geneve-01

Xiao Min ZTE

Greg Mirsky ZTE

Santosh Pallagatti VMware

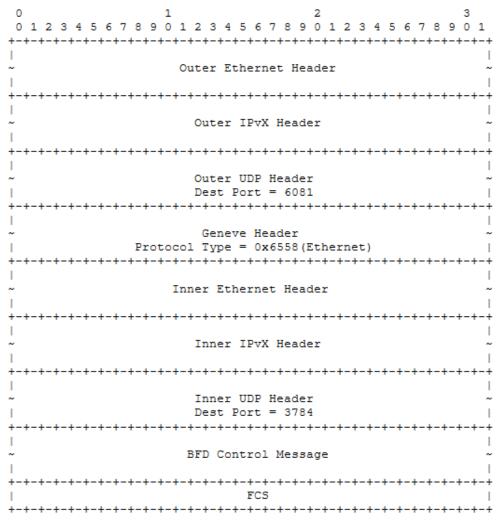
### Use NVO3 official terms to substitute unofficial terms



"NVE Reference Model" of RFC8014

- NVE Network Virtualization Edge
- TS Tenant System
- VAP Virtual Access Point

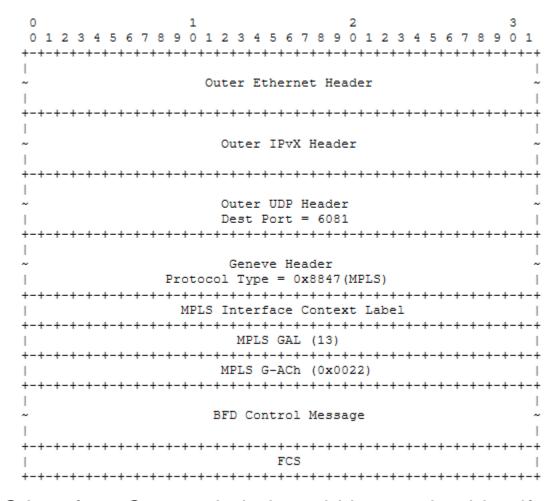
# BFD over Geneve Encapsulations (1/3)



## BFD over Geneve Encapsulations(2/3)

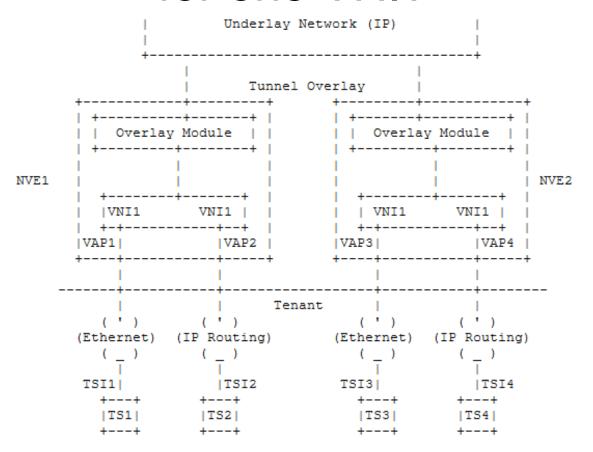
(	0 1				2							3	
(	0 1 2 3 4 5 6 7 8 9 0 1	2 3 4	5 6 7	8 9	0 1	2	3 4	5	6 7	8	9	0	1
+-	+-	+-+	-+-+-+	+-+	+-+	+-+	-+	+-+	-+-	+-+	-+	-+	-+
ı													
~	Outer Ethernet Header												
Ł	! +-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-+-												
Т	1												-7
_	~	Outer	IPvX F	leade	r								~
ï	I												ı
· · · · · · · · · · · · · · · · · · ·													
I	I												
~	Outer UDP Header												
I	I	Dest P	ort =	6081	L								
+-	+-	+	-+-+-+	+-+	+	+-+	-+	+-+	-+-	+-+	-+	-+	-+
L	I												
~	- Protocol Time		e Head			-06	DD / 1	r D	· 6 \				~
L	Protocol Type = 0x0800(IPv4) or ox86DD(IPv6)												
Т	1												- T
٠	~	Inner	IPvX H	leade	r								
~	~ Src IP = IP address	Src IP = IP address of a VAP of the originating NVE											
ï		Dest IP = IP address of a VAP of the terminating NVE											
+-	+-+-+-+-+-+-+-+-+-+-+-	+-+	-+-+-+	+-+	+-+	+-+	-+	+-+	-+-	+-+	-+	-+	-+
L	I												
~	~	Inner											~
I	I	Dest P											
+-	+-	+	-+-+-+	+-+	+	+-+	-+	+-+	-+-	+-+	-+	-+	-+
L	1	משט משט	trol N		. ~ ~								- 1
ĩ	~ .	3FD Con	CFOI M	iess:	ige								1
ļ.	+-		-+-+-4	+-4		+-+	-+	+-+	-+-	+-+	-+	-+	_+
ï	1		FCS										i
i.				4-4	4	+-+	-+	+	-+-	+-+	_+	-+	

## BFD over Geneve Encapsulations (3/3)



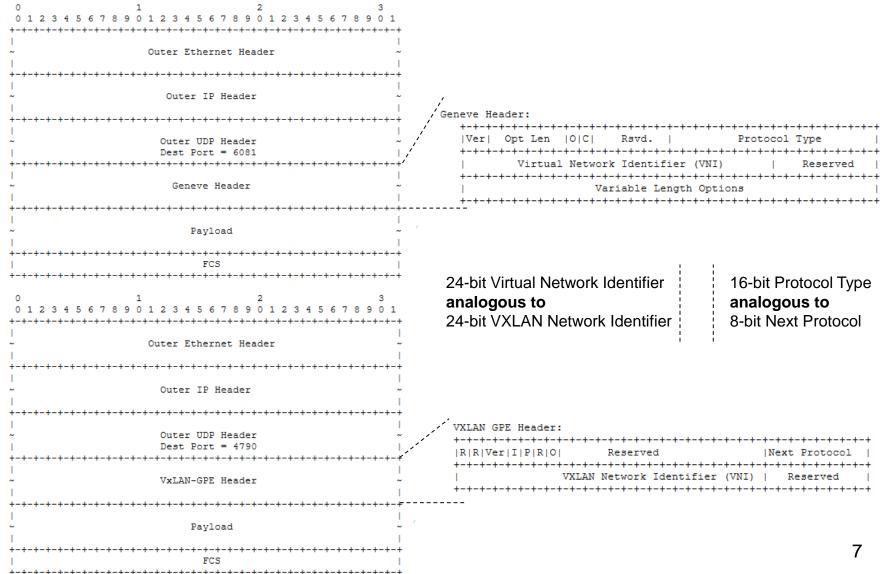
MPLS Interface Context Label would be used to identify a VAP of the originating NVE and a VAP of the terminating NVE

#### Should we allow multiple BFD sessions for one VNI?



- This figure is derived from "NVE Reference Model" of RFC8014
- From the NVO3 architecture point of view, it should be allowed

### Do we need to add some notes saying its applicability to VxLAN-GPE?



#### Next steps

Ask for WG adoption